

VI. MODULE VI - POST-CLOSURE CARE PLAN

VI.A. MODULE HIGHLIGHTS

This Module specifies the post-closure care requirements for the WIPP. Post-closure care requirements are applicable to Underground Hazardous Waste Disposal Units (**Underground HWDUs**) and include requirements for routine inspection and maintenance of the closed panel entry drifts, and air monitoring as required. Post-closure care requirements apply immediately after certification of closure of each Underground HWDU and continue for thirty (30) years after final closure of the facility. Post-closure care requires active institutional controls including fencing and warning signs, inspections, maintenance, monitoring of ground water, and control and cleanup of releases.

VI.B. UNIT IDENTIFICATION

The Permittees shall provide post-closure care for the closed Underground HWDUs (eight (8) panels and two (2) access drifts), and for the facility after final closure, as specified in Permit Attachment J (Post-Closure Plan) and as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.110(b)).

VI.C. POST-CLOSURE PROCEDURES AND USE OF PROPERTY

The Permittees shall conduct post-closure care after completion of closure of each Underground HWDU identified in Permit Condition VI.B and shall continue post-closure care for thirty (30) years after the date of certification of final closure of the facility, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.117(a)(1)). The Permittees may request, at any time during the post-closure care period, a Permit modification to shorten the applicable post-closure care period. The Secretary may shorten the post-closure care period if the Secretary finds the reduced period is sufficient to protect human health and the environment, as provided by 20.4.1.500 NMAC (incorporating 40 CFR §264.117(a)(2)(i)). The Secretary may extend the applicable post-closure care period if the Secretary finds an extension is necessary to protect human health and the environment, as provided by 20.4.1.500 NMAC (incorporating 40 CFR §264.117(a)(2)(ii)).

VI.C.1. Post-Closure Plan

The Permittees shall implement the Post-Closure Plan in Permit Attachment J and Permit Attachment J1 (Active Institutional Controls), as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.117(d), §264.118(b) and §264.603).

VI.C.2. Post-Closure Care and Monitoring

- VI.C.2.a. General monitoring, inspection, and maintenance requirements - the Permittees shall monitor and perform inspections of the Underground HWDU closures, and perform maintenance of the closed Underground HWDU access drifts after construction of each HWDU closure system, as specified in Permit Attachment M2 (Geologic Repository Disposal). The Permittees shall monitor and maintain the components, structures and equipment of the waste containment systems at the facility as specified in Permit Attachments J and J1, and as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.117(a)(1)(ii)).
- VI.C.2.b. Air monitoring requirements - the Permittees shall maintain ventilation and perform daily monitoring of the mine ventilation air downstream from closed Underground HWDUs at the beginning of days when work is to be performed downstream from the closed Underground HWDUs, as specified in Permit Attachment E (Procedures to Prevent Hazards). The Permittees shall implement the Confirmatory Volatile Organic Compound Monitoring Plan in Permit Attachment N (Confirmatory Volatile Organic Compound Monitoring Plan) during the post-closure care period for closed Underground HWDUs, until six (6) months after the certification of closure of all Underground HWDUs, as specified in Permit Condition IV.F.2. [20.4.1.500 NMAC (incorporating 40 CFR §264.117(a), §264.601 and §264.603)]
- VI.C.2.c. Detection monitoring program - the Permittees shall maintain and implement the Detection Monitoring Program during the post-closure care period as specified in Module V and Permit Attachment L (WIPP Groundwater Monitoring Plan), and as required by 20.4.1.500 NMAC (incorporating 40 CFR §264 Subpart F and §264.117(a)(1)).

VI.C.3. Security

The Permittees shall comply with the applicable post-closure security requirements as specified in Permit Attachments J and J1 and as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.117(b)(2)).

VI.C.4. Post-Closure Disturbance

The Permittees shall not allow any use of the facility surface area above the Underground HWDUs designated in Permit Condition VI.B which could disturb the integrity of the shaft sealing systems or any components of the waste containment system, or the function of the facility monitoring systems during the post-closure care period, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.117(c)), except as allowed under 20.4.1.500 NMAC (incorporating 40 CFR §264.117(c)(1) or (2)).

VI.D. NOTICES AND CERTIFICATION

VI.D.1. Disposal Unit Records

No later than sixty (60) calendar days after certification of closure of each Underground HWDU, the Permittees shall submit to the Secretary and the local zoning authority, or the authority with jurisdiction over local land use, a record of the type, location, and quantity of TRU mixed waste disposed in each Underground HWDU, as required by 20.4.1.500 NMAC (incorporating 40 CFR 264.119(a)).

VI.D.2. Deed Notice

Within sixty (60) calendar days of certification of closure of the first Underground HWDU and within sixty (60) calendar days of certification of the last Underground HWDU, the Permittees shall comply with the following conditions, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.119(b)):

VI.D.2.a. Deed recordation - the Permittees shall record, in accordance with New Mexico law, a notation on the deed to the facility property, or on some other instrument that is normally examined during a title search, that will in perpetuity notify any potential purchaser of the property that:

- (i) The land has been used to manage TRU mixed waste; and
- (ii) Its use is restricted under 20.4.1.500 NMAC (incorporating 40 CFR §264 Subpart G) regulations; and
- (iii) The survey plat and record of the type, location, and quantity of TRU mixed waste disposed in each Underground HWDU have been filed with the Secretary and the local zoning authority or the authority with jurisdiction over local land use.

VI.D.2.b. Certification - the Permittees shall submit a certification to the Secretary, signed by the Permittees, stating the Permittees have recorded the notation specified in Permit Condition VI.D.2.a, including a copy of the document(s) in

which the notation has been placed, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.119(b)).

VI.D.3. Removal of Wastes or Contaminated Soils

If the Permittees, or any subsequent owner or operator of the land upon which the Underground HWDUs are located, wishes to remove TRU mixed wastes, TRU mixed waste residues, or contaminated soils, they shall request a modification to this permit in accordance with the applicable requirements in 20.4.1.900 NMAC (incorporating 40 CFR Part 270) and 4.1.901. The Permittees or any subsequent owner or operator of the land shall demonstrate the removal of TRU mixed wastes will satisfy the criteria of 20.4.1.500 NMAC (incorporating 40 CFR §264.117(c) and §264.119(c)).

VI.D.4. Completion of Post-Closure Care

No later than sixty (60) calendar days after completion of the post-closure care period for each Underground HWDU, the Permittees shall submit to the Secretary, by registered mail, a certification that the post-closure care for the Underground HWDU was performed in accordance with the specifications in the approved Post-Closure Plan, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.120). The Permittees and an independent New Mexico registered professional engineer shall sign the certification. The Permittees shall provide to the Secretary upon request the documentation supporting the professional engineer's certification, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.145(i) and §264.120).

VI.E. POST-CLOSURE PERMIT MODIFICATIONS

The Permittees shall submit a written notification of or request for a permit modification to amend the approved Post-Closure Plan at any time during the active life of the facility or during the post-closure care period, as required by 20.4.1.500, .900, and .901 NMAC (incorporating 40 CFR §§264.118(d) and 270). The Permittees shall include a copy of the proposed amended Post-Closure Plan for approval by the Secretary, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.118(d)).

VI.E.1. Changes Requiring a Permit Modification

Changes to the approved Post-Closure Plan which require a permit modification include, but are not limited to, the following circumstances specified in 20.4.1.500 NMAC (incorporating 40 CFR §264.118(d)(2)):

- VI.E.1.a. Operating plans - whenever changes in operating plans or facility design affect the approved Post-Closure Plan; or
- VI.E.1.b. Timing of closure - whenever there is a change in the expected year of final closure; or
- VI.E.1.c. Other events - whenever other events occur during the active life of the facility, including partial

or final closure, that affect the approved Post-Closure Plan.

VI.E.2. Timing of Permit Modification

The Permittees shall submit a written request for a permit modification at least sixty (60) calendar days prior to the proposed change in facility design or operation, or no later than sixty (60) calendar days after an unexpected event has occurred which affects the Post-Closure Plan, as required by 20.4.1.500 NMAC (incorporating §264.118(d)(3)).

MODULE VI ATTACHMENTS

Permit Attachment E (as modified from WIPP RCRA Part B Permit Application, "Procedures to Prevent Hazards" - Chapter F).

Permit Attachment J (as modified from WIPP RCRA Part B Permit Application, "Closure Plans, Post-Closure Plans, and Financial Requirements" - Chapter I).

Permit Attachment J1 (as modified from Supplemental Information to the WIPP RCRA Part B Permit Application, "Active Institutional Controls" - Appendix AIC).

Permit Attachment L (as modified from WIPP RCRA Part B Permit Application, "WIPP Groundwater Monitoring Program Plan" - Attachment D-18).

Permit Attachment M1 (as modified from WIPP RCRA Part B Permit Application, "Facility and Process Information" - Chapter D).

Permit Attachment N (as modified from WIPP RCRA Part B Permit Application, "Confirmatory Volatile Organic Compound Monitoring Plan" - Appendix D20).